

# Overcoming Obstacles to Preventive Conservation Projects in Italy: With a Case Study of the Savoy Carriage Collection of the Presidency of the Republic

Matteo Rossi Doria<sup>1</sup> and Stefan Michalski<sup>2</sup>

<sup>1</sup>Conservazione Beni Culturali, Rome, Italy; <sup>2</sup>Independent advisor, Rome, Italy

## ABSTRACT

Working on preventive conservation in Italy is difficult but not impossible. After small successes and setbacks convincing museums to adopt elements of preventive conservation in the 1990s, the first author (Rossi Doria) was contracted for 15 years to preserve the historic carriages and associated objects of the Presidency of the Republic of Italy. This required patience to overcome or circumvent obstacles such as an inflexible bureaucracy and the absence of any formal recognition of preventive conservation within the educational and contractual systems for heritage conservation. The key factors in his success were the support of the curators, the financial and planning autonomy of the Presidency, and the obvious need for conservation and preservation of these elegant and complex objects. The program began in 2001 with the recovery of the forgotten collection from inappropriate storage in several locations. The entire collection was surveyed and recorded, not only the carriages but also thousands of harnesses, saddles, clothing, fabrics, weapons and memorabilia. Multiple preventive and interventive actions were undertaken, such as pest eradication for all sensitive materials, environmental surveys, and everyday maintenance, as well as complex treatments for the ornate carriages. Analysis by country of published articles on preventive conservation and of IIC membership both confirm that the topic is not as well established in Italy as in many other countries. Some reasons and solutions are proposed.

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## Introduction

Lambert (2010) has surveyed the promising early history of preventive conservation in Italy up to the moment in 1976 when Giovanni Urbani, director of the Istituto Centrale di Restauro (ICR) proposed an ambitious plan for preventive preservation in the Umbria region. The plan failed to obtain regional government support and in consequence Urbani resigned.

For almost 40 years, the first author (Rossi Doria) has practiced privately as a paintings conservator in Italy, primarily as a liner specialized in very large works on canvas. He has observed the response of hundreds of paintings to the natural climate cycles of buildings in Italy. A childhood spent partly in the USA gave the author sufficient English to access the conservation literature, such as research in the 1990s on the mechanics of paintings and linings, their response to climate, and the integration of such knowledge into preventive conservation. It seemed a good idea to try and sell this rational approach to clients, alongside the main business of treatment.

In the following decades, Rossi Doria helped to form CESMAR7,<sup>1</sup> a group that organized a series of biennial conferences (2002–14) which introduced this international literature and significant researchers to Italian conservators through workshops. The hope was that an understanding of how other countries

were linking science with preventive conservation practice would infiltrate the Italian mindset.

## Experiences in selling preventive conservation in Italy

### *An art gallery, 1993–96*

The Italian state operates many art collections founded by wealthy patrons, some still displayed in their *palazzo*. In 1993 Rossi Doria convinced the director of one such gallery, a friend, to implement a three-year plan for preventive conservation. During this period, directors of state museums had considerable independence (though by 2015 only 20 museums still had financial independence). A database for inventory and condition reporting was developed using Filemaker software. Backboards were installed on paintings. Data was collected from five thermohygrographs and two dataloggers inside the backings. The ability of such backboards to buffer RH changes was dramatically demonstrated. Paintings deformed much less than before as the season changed. Despite the evidence of benefits, when the director left in 1996 the preventive conservation plan was shelved (Rossi Doria, Coupez, and Pagetti 1999).

In 2016, a new director asked for revival of the database. Obsolescent software meant that data had to be

re-entered using screen captures from the old system! During a 2016 visit Rossi Doria noted that some backboards had been removed by someone from a state agency who was convinced that paintings 'needed to breathe'. The irony was that nine years earlier Rossi Doria had invited a paper at CESMAR7 on the benefits of backings by Michalski (2005). This museum, with its winter dryness due to heating rather than dampness due to lack of heat, was a candidate for airtight backboards.

### ***A municipal museum, 1999–2001***

The museum underwent an extensive renovation lasting several years. Rossi Doria was contracted to advise on the temporary storage of the diverse collection, and on conservation aspects of the renovation. A studio for treating paintings was designed and easily funded within the renovation budget, as was a €50,000 climate monitoring system with 25 sensors linked by telemetry. In the second year, operation of the system was transferred to staff, but without clear assignment of responsibility. The following year, when the batteries expired, so did use of the system. A program of integrated pest management using traps and monitoring was more successful – termites were discovered, and appropriate treatment implemented.

At the official opening of the museum, Rossi Doria met his next client, the collection manager of the Savoy carriage collection.

## **The conservation project for the Savoy carriage collection**

### ***The collection***

In 1946, Italy changed from a monarchy to a republic. All the household goods of the House of Savoy were transferred to the Presidency of the Republic. Among them was a collection of 105 carriages together with thousands of associated items: harnesses, saddles, livery, weapons, as well as memorabilia given by other royals (Colalucci 2009; Lattanzi 2009). The collection remained forgotten and spread across several locations until 2001 when it was decided to recover it.

### ***General strategies with this client***

The Presidency of the Republic is a prestigious and protocol-sensitive institution. The conservation team needed to establish a relationship of trust with the collection manager (acting as the 'client') as well as the curatorial and financial offices. Previous experience had taught Rossi Doria to wait for the right moment before proposing solutions.

The initial proposal to the client was a three year contract, but the institution balked. The client operated under procurement rules that required public tenders for any contracts over €40,000. Breaking the project into parts allowed the client and the offices above him to gradually become comfortable with this apparent need for preventive conservation as well as interventive treatments (Rossi Doria 2004).

### ***Moving the collection***

Temporary storage was prepared at the Museum of Military Motoring in Rome so that the collection could be examined and treated prior to final installation.

Carriages were moved to centralized temporary storage over a three year period, where they were sorted, cleaned, and given first-aid treatments to prevent losses. Trucking was provided by the Transport School of the Military City of Cecchignola and by private companies. Moving methods were refined as lessons were learned – it was soon required that a conservator always be present. Elaborate carriages use a suspension of leather 'braces' (straps) between the body and the undercarriage. A rope or wires were installed to take the weight off the now fragile braces (Figure 1). In the beginning, some moves used cranes



**Figure 1.** Cable to relieve the weight on the leather braces of a carriage.





**Figure 2.** Lifting a carriage using a crane.

(Figure 2) but this was judged too risky. Lifting was from below, with extra supports if necessary (Figure 3). Eventually, a truck with a low floor to minimize risks was purchased.

The thousands of associated objects and fitted containers were cleaned, treated, and placed in 'visible storage' consisting of elaborate glass-fronted cabinets built in rooms near the carriage display area at the Palazzo del Quirinale.

### **An inventory plus growing awareness**

A database for inventory and object descriptions was created using the system developed previously. Three years of discovery by conservators and curators created a large body of knowledge about the history, meaning, and fabrication of the objects. Systematic recording allowed patterns of deterioration, fabrication, and probable treatments to emerge. A wide network of consultants and suppliers developed, essential to the design of treatments.

### **Pest control**

By 2004, it was apparent that rapid and comprehensive pest treatment was essential. Furniture beetle (*anobium punctatum*) was widespread, and some carriage doors had collapsed. Textiles and leather components were being damaged by other pest species too. Two treatment methods were studied: the soon-to-be banned methyl bromide and the new method of anoxia. Methyl bromide was found to be 20 times less costly and three times as fast, so a treatment

space was constructed in a Presidential property outside Rome (Figure 4). No recurrence of furniture beetle has been observed in the 12 ensuing years.

### **Restoration and display of select carriages**

In 2006, the rooms for permanent display of 30 carriages were ready at the Quirinale. Final conservation treatments were carried out *in situ*. A minimalist approach that respected aging and wear and tear was proposed, explained, and accepted.

Within this select group were four carriages known as Grand Gala Berlins. Such carriages combine not only elaborate gilt wood and luxurious upholstery but detailed oil paintings on every flat surface. The team studied the approach of other carriage museums in Lisbon, Versailles, Vienna, Madrid, London as well as Italian collections in Macerata, Piacenza, and Naples. Through modern social networks it was possible to gather huge amounts of information, as well as more links to suppliers, skilled artisans, and amateur and expert associations around the world. It was also an opportunity to share with this community the activity and significance of the Savoy Collection. Further details of the treatments can be found in Rossi Doria (2009) and Rossi Doria and Marzullo (2009).

### **Environmental issues**

In 2008 an information technology division was formed within the facilities management department, and assigned the installation of a climate monitoring system. Once operational, the system confirmed that





**Figure 3.** Lifting a carriage using a pallet.

there was no control of the relative humidity (RH). More meetings followed but the system was simply a series of heating and cooling packages with no humidification or dehumidification. The consultants admitted that no improvement was possible without substantial modifications. Nothing was changed but the carriages seemed to tolerate the climate for several years without damage.

In 2014, President Sergio Mattarella wanted the Quirinale to become 'the home of all Italians', including the carriages. In 2016, the carriage rooms were opened to the public, with great success. Unfortunately, the

large doors which had rarely been opened were now propped open for hours, despite recommendations against it. When the outdoor temperature reached 2°C, the temperature at carriages near a heater reached 30°C with 15–20% RH. Paint flaking became obvious.

Rossi Doria's last report to the client, in 2017, highlighted these problems. Coincidentally, the client had become concerned about the propriety of filling the next contract without an open competition. The care of the collection contract went to public tender, and in early 2108 Rossi Doria was underbid, and is no longer engaging with this collection.



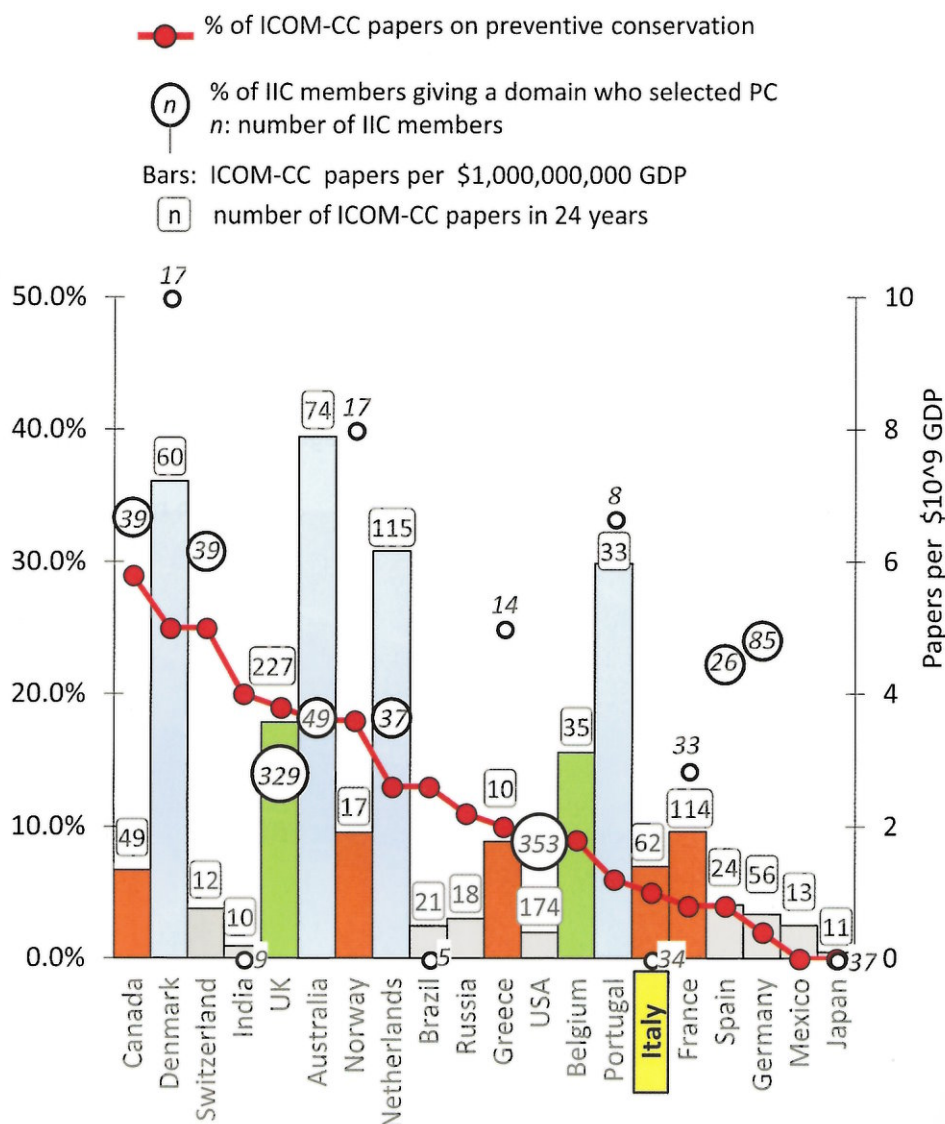
**Figure 4.** Treatment space created for methyl bromide treatment of multiple items.

## Italy and the preventive conservation literature

The Conservation Committee of the International Council for Museums (ICOM-CC) provides a unique forum for discussion on research and practice in preventive conservation, in its working group on this topic, which runs a large session at each triennial meeting of ICOM-CC, and on occasion with other working groups as well. To compare publications on the topic internationally, Figure 5 presents data on all the countries that have contributed at least 10 papers during eight ICOM-CC triennial meetings over 1993–2014, extracted from the ICCROM (2018a) online database. Countries are listed left to right, ranked by the percentage of their papers (as defined by the country of the first author) that were on the topic of preventive conservation. The bars plot the 'national productivity' obtained by dividing the

number of articles per year by the annual GDP of the country (Wikipedia 2018). Italy is among the countries with a moderate productivity, but a very low contribution to preventive conservation, only 5%.

Membership data available to existing IIC members can be used to investigate specialization in preventive conservation among conservation professionals who are personal members of IIC. Black circles in Figure 5 plot IIC members who provided a description of their professional expertise, and who selected preventive conservation or equivalent, namely collection care, collection conservation, collection management, preservation, all extracted by Stefan Michalski from the IIC (2018) online database. Countries with more accurate data (larger black circles indicate a larger sample size) are consistent with the red plot, i.e. the proportion of IIC members who specialize in preventive conservation is consistent with the proportion that write for the



**Figure 5.** Percentage (left axis) of papers on preventive conservation at ICOM-CC triennial meetings 1993–2014 (red dots). The bar graph shows productivity in ICOM-CC papers (all topics) per \$trillion of GDP (right axis), color coded as: grey = 0.2–1; orange = 1–2; green = 3–5; blue = 6–8. The black circles show the percentage of IIC members who specified preventive conservation as their area of expertise, and their diameter indicates sample size (in effect, accuracy).



**Table 1.** Contributions to IGILC annual conferences (2012, 2013, 2015, 2016, 2017).

	Papers	Posters
Total contributions over 5 years, all topics	165	156
Preventive conservation of buildings or monuments	2%	2%
Preventive conservation of museum collections, any element, e.g. deterioration, monitoring, storage improvements, lighting	4%	6%
Preventive conservation of museum collections, implementation of systematic plan	2%	3%

international literature. Germany and Spain are outliers – identifying strongly as involved with preventive conservation within IIC but not ICOM-CC: perhaps they publish in national publications instead. Italy is unique as the only EU country with no IIC members listing preventive conservation as their professional expertise (Italian members report less detail in general, 9% of them doing so, compared to all the other countries, where 20–40% report).

Table 1 provides a breakdown of the last five annual conferences of the Italian Group of IIC for which tables of contents are available online (IGILC 2018). The size of these proceedings is impressive, but the proportion of papers on preventive conservation is as small as it is for ICOM-CC papers, approximately 5%. When these few papers were examined closely, at most 3% could be considered case studies of systematic preventive conservation, amounting to one paper and one poster per year.

### **Preventive conservation luminaries in Italy**

Italy does have a strong literature covering certain aspects of preventive conservation. A preventive approach for heritage has been championed by authors such as Zanardi (2000) and Petraroia (2000) but their focus is the built heritage. In the 2000s a comprehensive survey of the vulnerabilities of historic sites and monuments to natural hazards was completed and correlated with the natural hazards map of Italy (Bartolomucci and Cacace 2009). There is a strong Italian tradition of research into the physics of museum microclimates, pioneered by Camuffo (1998, 2013) and Bernardi (2003). The recent book by Pretelli and Fabbri (2017) continues this tradition for the physics of buildings. The most extensive history of museum climate guidelines and their engineering implementation was written for a doctoral thesis at an Italian university (Luciani 2013). In the authors' experience, however, such theoretical knowledge from national research institutes and universities has not trickled down to the grass roots of practice in Italy.

The 'father' of preventive conservation, Gael de Guichen, worked for ICCROM, based in Rome, for over four decades! He created *Preventive Conservation for Museums in Africa* (Little et al. 1996), wrote 'Preventive conservation: a mere fad or far-reaching change?' for

*Museum International* (de Guichen 1999), initiated a UNESCO-ICCROM survey that found that problems in museum storage were widespread, and championed a method for addressing these issues, called *RE-ORG*. Training and implementation has been requested by 27 countries, from Belgium to Nigeria, Serbia to China, but not Italy (ICCROM 2018b). This is not the fault of ICCROM, but it is an indication that either Italy does not perceive its need, or does not act on it.

### **Why is preventive conservation so difficult in Italy?**

In Italy, all cultural heritage is subject to protection by the state. Any act or decision must pass through the Ministry of Cultural and Environmental Heritage. National conservation management is centralized in a ministerial bureaucracy that appears unable to comprehend or implement an adequate strategy for the many risks to Italian cultural heritage. There are no conservation scientists in any managing roles within this bureaucracy, and no mechanism to educate existing bureaucrats.

'Italy has been plagued for years with unstable governments' stated the *International New York Times* (Dixon 2014). The heritage regulations – already complex – are subject to constant revisions. Over the past 20 years, the Ministry has experienced numerous internal re-organizations – some have lasted as little as a few months. Long-term planning of preventive conservation is impossible. Currently, preservation programs offered by the ministry allocate funds to 'restoration' and 'maintenance' but do not recognize 'preventive conservation', therefore funds cannot be allocated!

Private patrons do fund conservation projects in Italy, but they look for dramatic restorations of the most valuable and well-known objects. This tendency is not peculiar to Italy, but other sources that do fund preventive conservation projects such as the Heritage Lottery Fund in the UK and the foundations that fund heritage preservation in the USA do not exist in Italy.

The Italian conservation community has, until recently, not been very open to international influence. Even the terminology of preventive conservation (and the conceptual framework that supports it) has not been adopted by the Italian community. University programs have been slow to include preventive conservation as a stand-alone subject, let alone as a specialization, whereas in the rest of Europe, countries with specializations include the UK, France, Germany, and Spain (Katrakazis 2018).

### **Conclusions**

The first author's long involvement bringing a forgotten and magnificent national collection to life has ended with the private conservator's nightmare –

being underbid! As with the previous projects, he was left with a sense that clients were suspicious of a freelance conservator who advocated too strongly for preventive conservation. In retrospect, any successes achieved in this and earlier projects relied entirely on the careful nurturing of personal connections – one could not build on a client's recognition of preventive conservation because there wasn't any.

Preventive conservation thinking is not integrated into any layers of the heritage community in Italy, from state and private owners of the objects, through the managers who implement the decisions of owners, to the conservation professionals that provide the services, and finally to the associations and educational institutions that inform those managers and professionals. Italy is not unique in any of these problems, but the international literature, the self-identification by IIC membership as a contributor to preventive conservation, and the first author's long experience, suggest that Italy has a larger than average discrepancy between the wealth of its collections and the implementation of preventive conservation.

Rossi Doria has discussed Urbani's rejected proposal with colleagues (who wished to remain anonymous!) and the consensus was that his plan was too ambitious, too theoretical, too top-down, and that he failed to engage with the local politicians. To be practical and self-sustaining, not just sustainable, preventive conservation needs to be bottom-up. Of course, the top needs to be familiar enough with its effectiveness to authorize, if not initiate, its implementation.

Rossi Doria now teaches a semester in paintings conservation at an Italian university. He tells all students to become familiar with preventive conservation as a core component of their future practice, and to develop strong networks with future colleagues and local institutions in other programs, to integrate knowledge but also to integrate their profession. In the first paper presented at the IIC 1994 conference on preventive conservation, Koller (1994) showed examples of eighteenth-century backboards made with wooden panels, already known then to prevent damage to paintings on canvas. The authors have also seen such examples installed by eighteenth-century restorers in Rome. Although preventive conservation is much more than just control of RH, this subtle technique is a perfect example of the integration of treatment and prevention that Italian restorers mastered long ago, lost from their professional knowledge, but can master again.

## Note

1. [www.cesmar7.org](http://www.cesmar7.org).

## Disclosure statement

No potential conflict of interest was reported by the authors.

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